# FY ended March 2018

Consolidated Financial Results

May 10, 2018

DAICEL CORPORATION



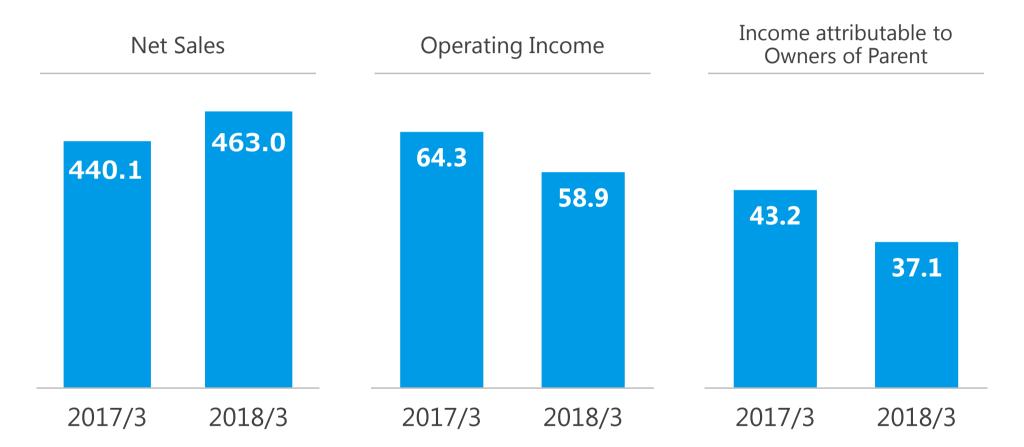
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# Highlights



- Increase in Net Sales, due mainly to an increase in sales volume of pyrotechnic devices and plastics, as well as the revision of selling prices
- Decrease in Operating Income due mainly to rising raw material and fuel procurement prices and a fire at the Ohtake Plant





# **Operating Results**

### (billion yen)

			, ,	
	2017/3	2018/3	Change	Rate of change
Net sales	440.1	463.0	+22.9	+5.2%
Operating income	64.3	58.9	△5.4	△8.4%
Non-operating income and expenses	1.9	2.2	+0.3	+13.3%
Ordinary income	66.2	61.1	△5.1	△7.7%
Extraordinary income and losses	△1.8	△1.9	△0.0	△1.2%
Income before income taxes	64.4	59.2	△5.1	△8.0.%
Income attributable to owners of parent	43.2	37.1	△6.1	△14.2%
ROE	12.2%	9.8%	△2.4%	
Operating income Ratio(%)	14.6%	12.7%	△1.9%	

### **Prices of Raw Materials**

	2017/3	2018/3
Methanol Asian spot price (USD/ton)	277	338
Crude oil Dubai (USD/bbl)	41	56
Domestic Naphtha (JPY/kl)	34,750	41,950

### Exchange rate

	2017/3	2018/3
USD/JPY	109	111





# Net Sales and Operating Income by Segment

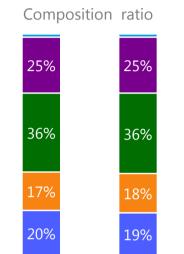
(billion yen)

Net Sales		2017/3 2018/3	Change	Rate of	Analysis		
	et Jaies	2017/3	2016/3	Change	change	Quantity	Prices
	Cellulosic Derivatives	89.5	89.1	△0.4	△0.5%	+2.3	△2.7
	Organic Chemicals	76.2	82.0	+5.9	+7.7%	△0.2	+6.0
	Plastics	156.9	168.3	+11.3	+7.2%	+5.8	+5.5
	Pyrotechnic Devices	111.2	117.2	+6.0	+5.4%	+2.9	+3.1
	Others	6.2	6.4	+0.2	+2.4%	+0.2	-
	Total	440.1	463.0	+22.9	+5.2%	+11.0	+11.9 <sup>※1</sup>

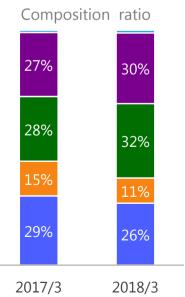
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O	perating Income	2017/3	2018/3	Change	change	Quantity	Prices	Other
	Cellulosic Derivatives	23.0	19.4	△3.6	△15.9%	+1.3	△4.5	△0.5
	Organic Chemicals	11.5	7.9	△3.6	△31.4%	+0.7	+1.9	△6.2
	Plastics	21.6	23.3	+1.7	+7.9%	+4.4	△0.8	△2.0
	Pyrotechnic Devices	21.3	22.2	+0.9	+4.2%	+5.6	△0.5	△4.3
	Others	0.7	0.8	+0.0	+1.6%	+0.0	-	-
	Corporate and elimination	△13.8	△14.5	△0.7	△5.2%	-	-	△0.7
	Total	64.3	58.9	△5.4	△8.4%	+12.0	△3.8 <sup>※2</sup>	△13.6

※2 Including Exchange rate impact +1.5.



2017/3 2018/3







# Forecast

(billion yen)

	2018/3 (Results)	2019/3 (Forecast)	Change	Rate of change
Net sales	463.0	478.0	+15.0	+3.2%
Operating income	58.9	51.0	△7.9	△13.5%
Ordinary income	61.1	53.0	△8.1	△13.2%
Income attributable to owners of parent	37.1	37.0	△0.1	△0.2%
Operating income Ratio (%)	12.7%	10.7%	△2.0%	

### **Prices of Raw Materials**

	2017/3 (Results)	2018/3 (Forecast)
Methanol Asian spot price (USD/ton)	338	330
Crude oil Dubai (USD/bbl)	56	62
Domestic Naphtha (JPY/kl)	41,950	47,000

### Exchange rate

	2017/3 (Results)	2018/3 (Forecast)
USD/JPY	111	110



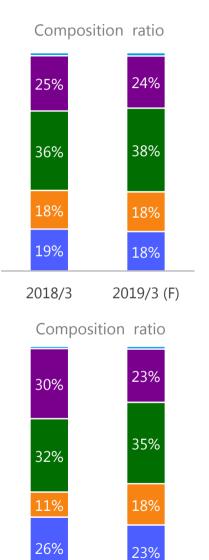


# Forecast - Net Sales and Operating income by Segment -

(billion yen)

Ne	t Sales	2018/3 (Results)	2019/3 (Forecast)	Change	Rate of change
	Cellulosic Derivatives	89.1	86.6	△2.5	△2.8%
	Organic Chemicals	82.0	87.0	+5.0	+6.0%
	Plastics	168.3	183.1	+14.8	+8.8%
	Pyrotechnic Devices	117.2	114.0	△3.2	△2.7%
	Others	6.4	7.3	+0.9	+14.2%
	Total	463.0	478.0	+15.0	+3.2%

Op	erating income	2018/3 (Results)	2019/3 (Forecast)	Change	Rate of change
	Cellulosic Derivatives	19.4	15.5	△3.9	△19.9%
	Organic Chemicals	7.9	12.0	+4.1	+51.6%
	Plastics	23.3	23.7	+0.4	+1.9%
	Pyrotechnic Devices	22.2	15.5	△6.7	△30.1%
	Others	0.8	0.8	+0.0	+6.2%
	Corporate and elimination	△14.5	△16.5	△2.0	△13.6%
	Total	58.9	51.0	△7.9	△13.5%

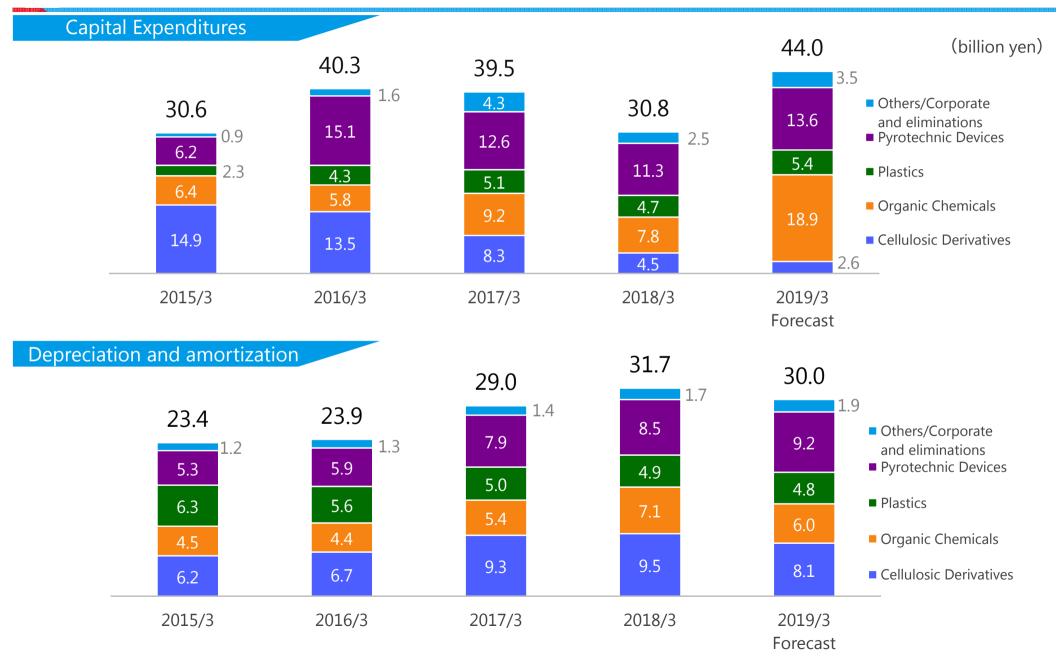


2018/3

2019/3 (F)

#### 3. Capital Expenditures/Depreciation and amortization







# Major Capital Expenditures Plans in FY ending March 2019

#### Organic Chemicals

- Renewal of CO(Carbon Monoxide) plant
- New facility for innovation, "Innovation Center Arai" (at Arai Plant)

#### Plastics

- Increase in production capacity of Engineering Plastic Compounds (Taiwan, Malaysia)
- Pyrotechnic Devices
- New production facility for initiators in China
- Increase in production capacity for inflators
- Installation of demonstration facility for gas generants
- Implementation of globally integrated management system utilizing image processing technology

### Major Capital Expenditures Plans After April 1, 2019

- Organic Chemicals
- New plant for 1.3BG (under consideration)
- Plastics
- Increase in POM production capacity (under consideration)
- Installation of new clean coaters for development of functional films
- Pyrotechnic Devices
- Increase inflator production capacity
- New facility for innovation, "Innovation Center Harima" (at Harima Plant)
- Common to Segments
- Integrated Production Center (IPC) at Ohtake Plant
- New facility for developing and assuring functions at Aboshi Plant
- New boiler at Aboshi Plant



# TOPICS of FY ending March 2019

### 1. Renewal of CO(Carbon Monoxide) plant





- -Renewal of CO plant, producing CO as one of raw materials for Acetic Acid
- -Optimization of raw materials in line with renewal of CO plant (Switch from Asphalt to Coal)
- -Development of stable operations and stabilization of raw material costs as a result

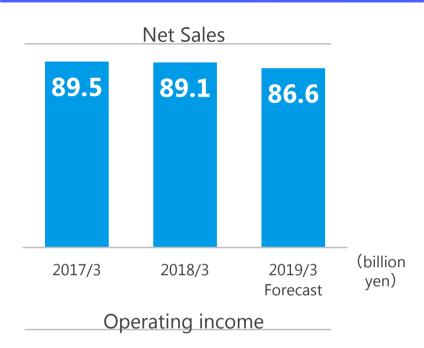
2. Suspension of 2-year Continuous Operation: Aboshi Acetic Acid plant and CO plant

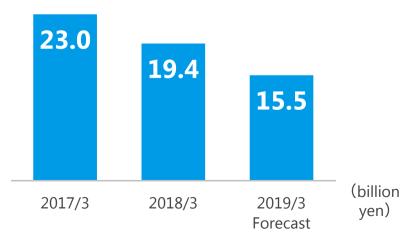


- -For production increase purposes, we have been conducting 2year continuous operation and maintaining our accreditation as an "Accredited Safety Inspection Executor" as per the High Pressure Gas Safety Act
- -However, to construct the new CO plant, we have suspended 2year continuous operation and will thus defer renewal of the accreditation.
- Performance of continuous stable operations for 2 or more years at the new CO plant is required to apply for accreditation as an "Accredited Safety Inspection Executor," and these conditions will be met at a later date.



# **Cellulosic Derivatives**







(Cellulose Acetate: Flat)

- Demand decreased for LCD film applications
- Demand increased for other applications

( Acetate Tow for Cigarette Filters: Slightly Decrease)

- Increased in sales volume due to our efforts in strengthening relationships with main customers and developing new customers
- Decline in selling price due to softening of the market

### Operating Income $\triangle$ 3.6 billion yen

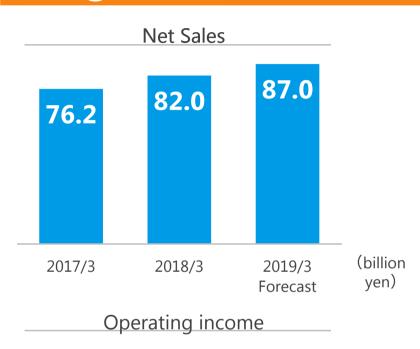
Decrease due mainly to the negative impact of the softening of the market and an increase in raw material and fuel prices.

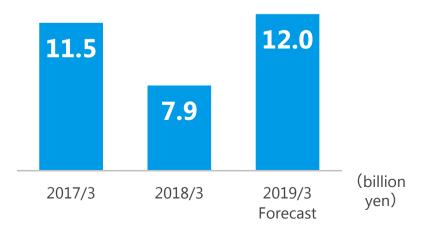
#### 2019/3 Forecast: Decrease in sales and income

- Cellulose acetate: Decreased demand for LCD film applications, and increase for other applications such as acetate tow for cigarette filters
- Acetate Tow for Cigarette Filters: In world-wide glut, but fullcapacity operation will be maintained. Increase in sales volume, decline in selling price



# **Organic Chemicals**





### Net Sales +5.9 billion yen (Exchange rate impact +0.5 billion yen)

(Acetic Acid: Increase)

 Decrease in sales volume because of the biennial periodic maintenance of our Aboshi Plant.
 Upward trend in the market.

(Organic Chemicals: Increase)

■ Increase in sales volume. ■ The revision of selling prices resulted from rising raw material and fuel procurement prices.

(Performance Chemicals: Flat)

- Sales volume of peracetic acid derivatives decreased due to the fire.
- Sales volume of other products for electronic materials increased.
- Steady demand for cosmetics/healthcare.

(Chiral Separation business: Increase)

- Increase in column and chiral stationary phase (CSP) sales.
- Growth of new business in India.

### Operating Income $\triangle$ 3.6 billion yen

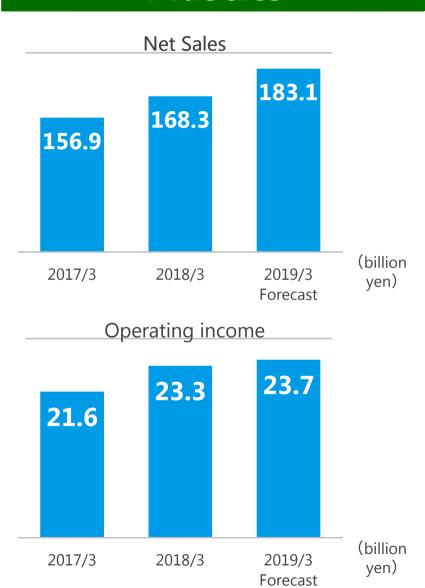
Decrease due mainly to the impact of rising raw material and fuel procurement prices, increases in R&D and depreciation costs.

#### 2019/3 Forecast: Increase in sales and income

- Acetic acid: Upward trend in the market
- Performance Chemicals: Increase in sales due to increase in electronic materials products and cosmetics/healthcare, increase in sales of peracetic acid derivatives due to recovery of the peracetic acid plant
- Full recovery of the peracetic acid plant in autumn 2018.



# **Plastics**



Net Sales +11.3 billion yen (Exchange rate impact +2.0 billion yen)

(Engineering Plastics business: Increase)

- Increase in sales volume due to growing demand for automobile parts and smartphones and progress in adoption of new parts.
- Effect of the revision of selling prices resulting from rising raw material and fuel cost, and foreign exchange rates fluctuations.

(Plastic Compound business: Increase)

- Decrease in sales volume in mainly overseas markets.
- Effect of the revision of selling prices resulting from rising raw material and fuel cost, and foreign exchange rates fluctuations.

(Plastic Processing business: Decrease)

Decrease in sheet sales.

### Operating Income +1.7 billion yen

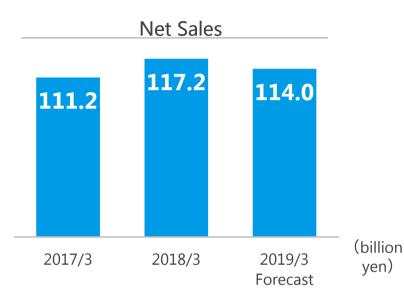
■ Increase due mainly to an increase in sales volume, despite a rise in raw material and fuel costs.

#### 2019/3 Forecast: Increase in sales and income

- Engineering Plastics: Increase in sales volume due to growing demand / Operating income will remain flat due to rising raw fuel costs and increased costs for future growth.
- Mainly due to an increase in sales of Plastic Compound business, increased income in this segment



# **Pyrotechnic Devices**





(Automobile Safety Parts business: Increase)

- Increase in inflator sales volume.
- Favorable foreign exchange rates.

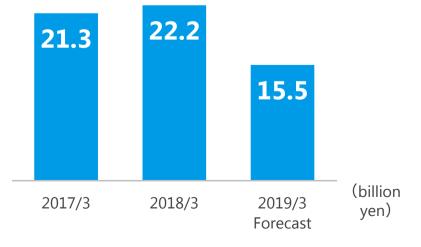
(Aerospace & Defense business : Decrease)

Decrease in volume of some products procured by the Ministry of Defense.

# Operating Income +0.9 billion yen

Increase due to an increase in sales volume and other factors.





### 2019/3 Forecast: Decrease in sales and income

- Increase in sales volume of inflators
- Decrease in income mainly due to change in sales composition and decrease in sales volume of initiators
- Increase in R&D costs for future growth and cost for strengthening of business foundations, such as assuring product safety and quality control.





### Return to Shareholders

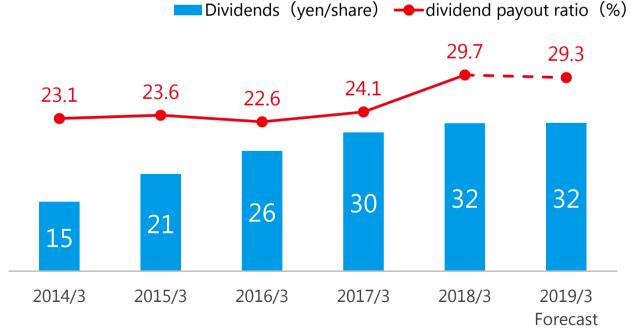
#### FY ended March 2018

- Dividends for 2nd half: 16 yen per share,
   Annual dividends: 32 yen per share
- \*Comparison with the previous year: 2 yen dividend increase
- Buyback of 7.5 million shares of company stock for approximately 10 billion yen.

### FY ending March 2019

- Forecast of Annual dividends : 32 yen per share
- Intent to buy back 8.3 million shares of company stock for maximum 10 billion yen.

Dividends (yen/share)	2018/3 (Results)	2019/3 (Forecast)
For 1st half	16	16
For 2nd half	16	16
Annual	32	32

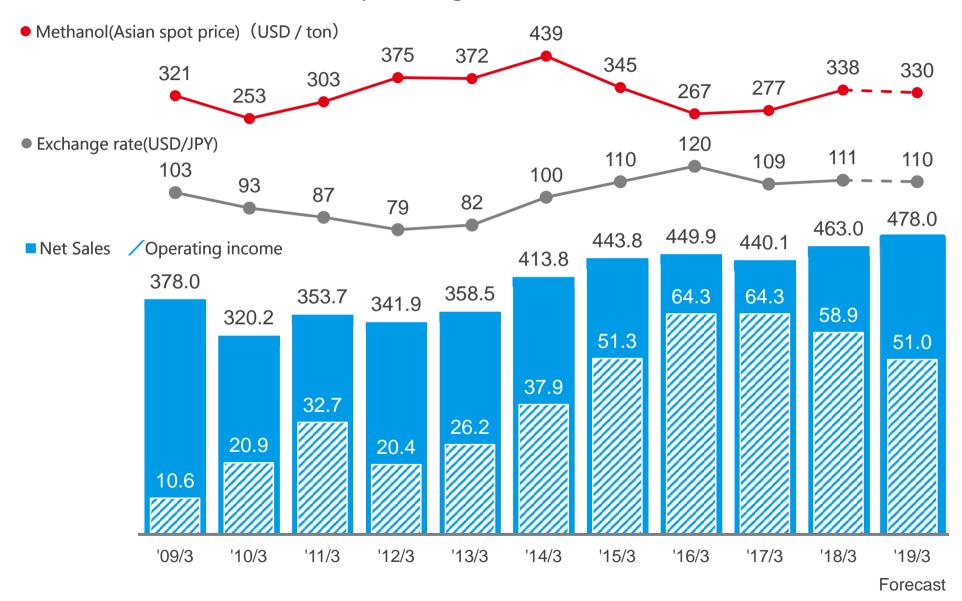




# REFERENCES



# Trend in Net Sales and Operating Income and Forecast







# Consolidated Balance Sheet

		Mar. 31, 2017	Mar. 31, 2018	Change	Remarks
Total current	t assets	307.2	354.6	+47.4	
	deposits and short-term nent securities	96.9	129.3	+32.4	
	and accounts ble-trade	88.3	93.3	+4.9	
Invento	ories	100.7	109.3	+8.6	
Other		21.3	22.7	+1.4	
Total non-cu	ırrent assets	292.5	289.5	△ 3.0	
	perty, plant and pment	185.2	184.0	△ 1.1	Acquisition+29.3, Depreciation $\triangle$ 30.0, Retirement $\triangle$ 0.4
Intar	ngible fixed assets	9.6	8.6	△ 1.0	
Inve asse	stments and other ets	97.7	96.9	△ 0.8	
Total assets	5	599.7	644.1	+44.4	
Liabilities		200.3	230.5	+30.3	
Inter	rest-bearing liabilities	72.3	99.7	+27.5	Bonds+30.0, Interest-bearing liabilities ratio 15.5%
Othe	er	128.0	130.8	+2.8	
Total net ass	Total net assets		413.5	+14.1	Capital adequacy ratio 59.8%
Total liabilities and net assets		599.7	644.1	+44.4	





# Consolidated Cash Flow Statement

		2017/3	2018/3	Change
	Cash flows from operating activities	86.2	66.9	△19.3
	Cash flows from investing activities	△34.7	△33.2	+1.5
Free o	cash flows	51.4	33.7	△17.7
Cash	flows from financing activities	△19.9	△2.0	+18.0
Other		△0.5	0.3	+0.7
Net in	crease (decrease) in cash and cash equivalents	31.0	32.0	+1.0
Cash	and cash equivalents at end of period	96.3	128.3	+32.0





# Quarterly Results for Sales and Operating income

Not Color	FY ended March 2017				FY ended March 2018			
Net Sales	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Cellulosic Derivatives	22.3	21.2	21.8	24.3	22.1	22.9	22.8	21.2
Organic Chemicals	19.0	17.5	18.8	20.9	19.6	19.5	20.5	22.5
Plastics	37.9	38.5	40.8	39.8	41.2	42.5	43.4	41.1
Pyrotechnic Devices	23.3	27.4	29.9	30.7	28.0	30.1	28.4	30.7
Others	1.3	1.6	1.7	1.7	1.3	1.7	1.6	1.8
Total	103.7	106.1	112.9	117.3	112.3	116.8	116.7	117.3

Operating		FY ended N	March 2017	FY ended March			March 2018	h 2018	
income	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Cellulosic Derivatives	6.4	5.3	5.4	5.9	5.5	5.5	4.7	3.7	
Organic Chemicals	3.5	2.2	2.8	3.0	2.1	1.5	2.0	2.3	
Plastics	6.3	5.0	5.4	4.8	5.7	6.4	5.5	5.6	
Pyrotechnic Devices	4.1	4.4	6.7	6.1	6.0	5.6	5.7	4.8	
Others	0.1	0.2	0.2	0.2	0.0	0.2	0.1	0.3	
Corporate and eliminations	△3.2	△3.7	△3.0	△4.0	△3.6	△3.6	△3.2	△4.1	
Total	17.2	13.4	17.5	16.2	15.8	15.7	14.6	12.8	





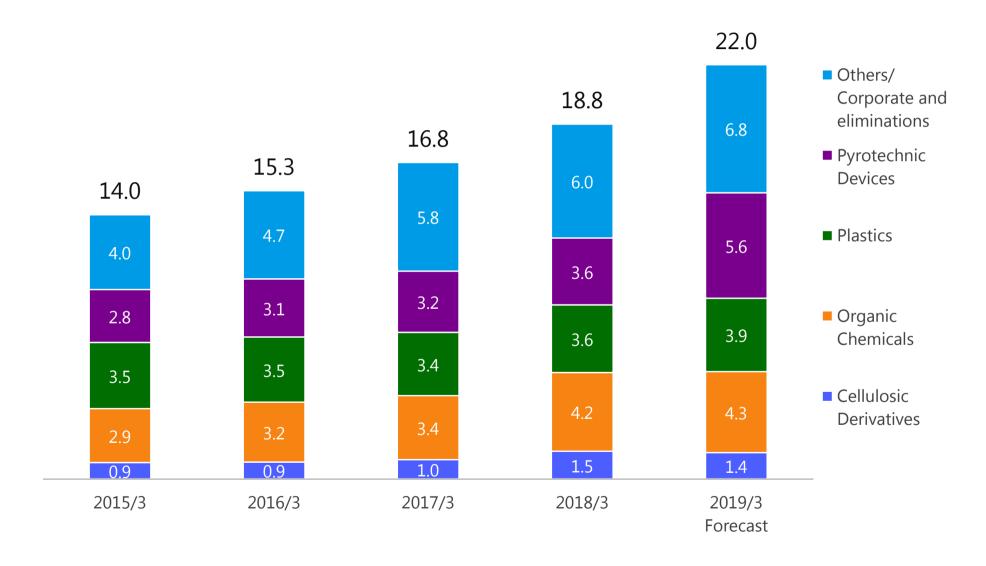
# Forecast - Financial Forecast -

	FY ended March 2018 (Results)		FY ending	FY ending March 2019 (Forecast)			
	1st half	2nd half	Total(A)	1st half	2nd half	Total(B)	(B)-(A)
Cellulosic Derivatives	45.1	44.0	89.1	43.1	43.5	86.6	△2.5
Organic Chemicals	39.1	42.9	82.0	43.0	44.0	87.0	+5.0
Plastics	83.7	84.5	168.3	90.6	92.5	183.1	+14.8
Pyrotechnic Devices	58.1	59.1	117.2	55.1	58.9	114.0	△3.2
Others	3.0	3.4	6.4	3.2	4.1	7.3	+0.9
Net sales	229.0	233.9	463.0	235.0	243.0	478.0	+15.0
Cellulosic Derivatives	11.0	8.3	19.4	8.5	7.0	15.5	△3.9
Organic Chemicals	3.6	4.3	7.9	6.0	6.0	12.0	+4.1
Plastics	12.2	11.1	23.3	12.0	11.7	23.7	+0.4
Pyrotechnic Devices	11.6	10.5	22.2	7.9	7.6	15.5	△6.7
Others	0.3	0.5	0.8	0.3	0.5	0.8	+0.0
Corporate and eliminations	△7.2	△7.3	△14.5	△8.2	△8.3	△16.5	△2.0
Operating income	31.5	27.4	58.9	26.5	24.5	51.0	△7.9
Ordinary income	33.1	27.9	61.1	27.5	25.5	53.0	△8.1
Income attributable to owners of parent	19.6	17.5	37.1	19.0	18.0	37.0	<b>△0.1</b>
(ref.) Exchange rate USD/JPY	111	111	111	110	110	110	





R&D





#### Major R&D themes

#### Cellulosic Derivatives

- Development of Production Technology and enhancement of Quality Competitiveness
- Development of new applications and products based on Cellulose material

#### Organic Chemicals

- Application of Process Innovation Technology to production plants to strengthen competitiveness of existing products
- Development of bio-separation/refinement business related to Chiral Business
- Expansion of our original materials and compounding technology to Cosmetic Market
- Developing electronic materials such as FDP/ArF resist materials and raw metal solvents, along with strengthening sales activities

#### Plastics

 Development of high spec engineering plastics in line with environmental requirements

#### Pyrotechnic Devices

- Research and development into new types of gas generants and inflators
- Developing new products utilizing pyrotechnic technology

#### Others/Corporate

#### Medical, health care

#### Medical appliances and materials

- Development of new drug delivery devices utilizing pyrotechnic technology
- Development of excipients to facilitate delivery of drugs (orally disintegrating tablets)
- Health care (functional foods)

#### Health care (functional foods)

• Development of new raw materials for functional foods

#### **Electronics**

#### Performance film

- Development of hard-coat films for displays
- Development of process films for clean energy production units

#### **Electronic materials**

- Development of materials related to 3D-IC (3D- integrated circuits)
- Development of materials related to printed electronics

#### **Optical devices**

• Development of UV cured lens for smartphones





# Assumptions

		FY ended March 2018		FY ending N	March 2019
		1st half (Results)	2nd half (Results)	1st half (Forecast)	2nd half (Forecast)
Exchange r	rate (USD/JPY)	111	111	110	110
	Methanol Asian spot price (USD/ton)	295	380	330	330
Raw Materials	Crude oil  Dubai  (USD/bbl)	50	62	62	62
	Domestic Naphtha (JPY/kl)	37,600	46,300	47,000	47,000

### Notes regarding Forward-Looking Statements



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